

COMPLETE LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-24. (Cancelled)

25. (currently amended) An emergency power generating unit that powers on board electrical systems in a train carriage when a main power generating unit operated by a train engine separate from the train carriage experiences a power outage, the emergency power generating unit comprising:

a fuel tank for storing a fuel;

a fuel-powered turbine coupled to receive the fuel from the fuel tank, the fuel-powered turbine operating independently from operation of the train engine;

an electric generator operable to generate an electric power signal, the electric generator mechanically coupled to the turbine so that the electric power signal can be generated during the power outage;~~and~~

an inverter operable to convert the electric power signal into an output power signal having electrical characteristics that are in accordance with electrical requirements for powering the on-board electrical systems of the train carriage;

a frame configured for mounting in a compartment underneath a floor on the train carriage; and

the turbine, generator and inverter mounted to the frame.

26. (Previously presented) The emergency generating unit of claim 25, wherein the turbine comprises a gas-powered turbine.

27. (canceled) The emergency generating unit of claim 25, wherein the turbine comprises a combustion chamber for combusting the fuel.

28 ~~2728~~. (currently amended) The emergency generating unit of claim 25, wherein the inverter includes output terminals coupled to an air conditioning system associated with the train carriage.

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29 ~~28~~. (currently amended) The emergency generating unit of claim ~~2728~~, wherein the electrical characteristics of the output power signal are in accordance with electric requirements for an air conditioning system associated with the train carriage.

30 ~~29~~. (currently amended) The emergency generating unit of claim 25, the turbine operating at an angular velocity corresponding to a turbine rotation speed and the emergency generating unit further comprising a control circuit receiving an input signal associated with the~~an~~ operating angular velocity of the turbine, the control circuit being operable to adjust the operating angular velocity to a desired operating angular velocity.

31 ~~30.~~ (currently amended) The emergency generating unit of claim ~~29~~, further comprising:

a fuel regulation valve that regulates ~~the fuel~~ flow from the fuel tank to the turbine; and

wherein the control circuit is operable to control the opening and closing of the fuel regulation valve to adjust the operating angular velocity of the turbine~~frequency~~.

32 ~~31.~~ (Previously presented) The emergency generating unit of claim 25, further comprising a control circuit operable to generate an output signal to open and close air exchange apertures in the train carriage.

33 ~~32.~~ (Previously presented) The emergency generating unit of claim 25, wherein the turbine further comprises an exhaust manifold and an air intake manifold, each manifold having a closing member.

34 ~~33.~~ (currently amended) A train carriage that can power on-board electrical systems when a main power generating unit of a train engine on a locomotive that is separate from the train carriage experiences a power outage, comprising:

a carriage body, the carriage body having a floor and ~~defining~~ a compartment located below the carriage floor;

a frame attached to the carriage body within the compartment; and

an electric generator secured to the frame, the electrical generator being operable to generate an electric power signal that powers the on-board electrical systems during the power outage.

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35 ~~34.~~ (Previously presented) The train carriage of claim ~~33~~, further comprising a carrying structure defined by the compartment, the frame and the carrying structure being attached so that the carrying structure supports the frame.

36 ~~35.~~ (canceled)

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37 ~~36.~~ (Previously presented) The train carriage of claim ~~33~~, further comprising a fuel tank for storing a fuel that provides energy to the electric generator, the fuel tank being secured within the compartment.

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38 ~~37.~~ (Previously presented) The train carriage of claim ~~36~~, the compartment defining at least one bracket for securing the fuel tank.

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39 ~~38.~~ (Previously presented) The train carriage of claim ~~36~~, further comprising a fuel pump for the fuel.

40 ~~39.~~ (Previously presented) The train carriage of claim ~~36~~, further comprising a turbine coupled to the fuel tank for powering the electric generator, the turbine being secured to the frame.

41 ~~40.~~ (Previously presented) The train carriage of claim ~~39~~, further comprising:
the carriage body defining an exhaust opening at an exterior of the carriage body; and
the turbine having an exhaust manifold coupled to the exhaust opening.

42 ~~41.~~ (Previously presented) The train carriage of claim ~~36~~, wherein the compartment is divided into a first section having the fuel tank and a second section having the frame.

43 ~~42.~~ (canceled)

44 ~~43.~~ (Previously presented) The train carriage of claim ~~39~~, further comprising:
the carriage body including an air conditioning system; and
the electric generator having an output terminal connected so that the electric power signal can power the air conditioning system during the power outage.

45 ~~44.~~ (Previously presented) The train carriage of claim ~~33~~, wherein the carriage body comprises a passenger car body.

46 ~~45.~~ (Previously presented) The train carriage of claim ~~39~~, further comprising:

the carriage body having an air conditioning system and defining an external air vent for the air conditioning system, the air conditioning system being coupled to the electric generator to receive the electric power signal;

an electrically controlled closing member having an open position that opens the external air vent and a closed position that closes the external air vent; and

a control circuit transmitting a closing signal that positions the closing member in the closed position when the electric generator is running at high power and in an open position when the electric generator is running at low power.

47 ~~46.~~ (canceled)